Name		Roll Number	

INDIAN SCHOOL MUSCAT
MIDDLE SECTION
FIRST TERM EXAMINATION 2018-19

SUBJECT - MATHEMATICS

Code: MXM14

CLASS: 8

Time Allotted: 2 ½ Hrs.

25.09.2018

Max .Marks: 80

General Instructions:

1. The question paper comprises of **four Sections, A, B, C** and **D**. You have to attempt all the sections.
2. **All** questions are **compulsory.**
3. **All answers should be written in the answer sheet provided.**

SECTION A

Qns		Marks
1.	The digit in one's place in the cube root of 1728 is _____.	1
2.	The product of $\frac{2}{5}$ and its multiplicative inverse is _____	1
3.	The measure of exterior angle of a regular hexagon is _____	1
4.	Find the number of non square numbers between 99^2 and 100^2	1
5.	The number of taps kept open and the time taken to empty the tank are in _____proportion	1
6.	Find the product : $(m^2)\times(2m^3)\times(4m^{15})$	1

SECTION B

7.	List any 4 rational numbers between $\frac{-1}{6} and \frac{-1}{3}$	2
8.	If 12 inches make 30 cm , how many inches are there in 120 cm	2
9.	Find the least number by which 968 must be multiplied to make it a perfect cube	2
10.	Find the number of diagonals of a 24 sided polygon	2
11.	Find the square root of 7056 by long division method	2
12.	Find the area of a rectangle having length (2a - b) and breadth (a+b)	2

SECTION C

13. What is the least number added to 5425 to make it a perfect square? 3

14. A stack of 729 sheets of paper is 27 cm thick. What will be the thickness of a stack of 540 sheets? 3

15. Find the cube root of 91125 by prime factorization method 3

16. Simplify : $2m(m^2 - 3m + 1)$ and find the value when m = 1 3

17. The adjacent angles of a rhombus are $(x + 5)^0$ and $(3x - 1)^0$ find all angles of the rhombus 3

18. Construct a quadrilateral ABCD in which AB = 5.5 cm, BC = 4.4 cm , AC = 5.3 cm AD = 6 cm and CD = 5.7 cm 3

19. What is the least number by which 9408 must be divided so as to get a perfect square ? 3

20. The product of two rational numbers is $\frac{-14}{9}$. If one of them is $\frac{-5}{18}$, find the other Number. 3

21. Subtract $(2a^2 - 3ab + 4bc + b^2)$ from $(5a^2 - 8ab - 6cb - 4b^2)$. 3

22. Find the sum of interior angles of a polygon having 20 sides. 3

SECTION D

23. Simplify using suitable property : $\left(\frac{-1}{2}\right)\times\left(\frac{5}{4}\right)+\left(\frac{-3}{8}\right)\times\left(\frac{5}{4}\right)$ 4

24. The exterior angles of a quadrilateral are (2x+5) ; (x-1); 3x and (3x- 4) . Find each exterior angle of the quadrilateral. 4

25. Find the other members of a Pythagorean triplet whose one member is 24. 4

26. There are 100 students in a hostel. Food provision for them is for 15 days. How long will these provisions last if 25 more students join the group? 4

27. Construct a rectangle PQRS in which PQ = 6.2 cm and QR = 4.5 cm. 4

28. Find the perimeter of a square land having area 9604 m^2 4

29. Simplify : $(3p^2 + 3pq - q^2)(2p + 3q) + 3q^3 - 6p^3$ 4

30. Construct a Rhombus EFGH in which EG = 5.4 cm and FH = 6.8 cm 4

End of the Question Paper.